Name of Work:-PACKAGE No-04 Construction of Classrooms to Govt PU College and providing grill fencing and Other developmental Works to ISRO layout Park, Vishweshwarayya park, Raj kumar Park, Sri Saibaba park Yelahanka Assembly Constituency Under Amrutha Nagarothana Grants

Detailed Measurements

Measurement Recorded On:	3/1/2023

Item No: EI 04

Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification (V-II, P.No-190, I No-21.10 of PWD SR 2021-22)

Description	Nos	L	B	D	Quantity
1	2	3	4	5	6
Puttenahalli lake bus depo to Anathapura gate	2	30.00		0.70 + 0.72 / 2.00	42.60
	2	30.00		0.72 + 0.47 / 2.00	35.70
	2	12.65		0.47 + 0.40 / 2.00	11.01
	2	30.00		0.50 + 0.40 / 2.00	27.00
	2	20.00		0.40 + 0.45 / 2.00	17.00
	2	30.00		0.45 + 0.56 / 2.00	30.30
	2	30.00		0.56 + 0.55 / 2.00	33.30
	2	30.00		0.55 + 0.53 / 2.00	32.40
	2	0.80		0.53 + 0.53 / 2.00	0.85
					230.154

Checked
Kumudhra 3/1/23
Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

PMC

Contractor

Assistant Engineer 3/1/2023
Project Division Yelahanka

Asst. Executive Engineer
Project Division Yelahanka

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DATE
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BRUHAT BANGLORE MAHANAGARA PALIKE

YALAHANKA ZONE, BANGLORE

MEASUREMENT SHEET

No. 4th & Part Bill

Name of Work:-PACKAGE No-04 Construction of Classrooms to Govt PU College and providing grill fencing and Other developmental Works to ISRO layout Park, Vishweshwarayya park, Raj kumar Park, Sri Saibaba park Yelahanka Assembly Constituency Under Amrutha Nagarothana Grants

Estimate Cost:	950.00 Lakhs
Head of Account:	Amrutha Nagrothana grants
Sanction No	Job No-002-23-000002
Tender Amount	Rs.8,81,41,302/-
Tender Period	9 Months
Reference to Agreement No:	EE(Project)/YNK Zone/WO/14/2022-23 date : 02-09-2022
Name of Contractor	B.B Umesha, Class 1 Contractor Bangalore
Date of Commencement as per agreement	03-09-2022
Date of Completion as per agreement	02-06-2023

Measurement recorded on : 16/03/2023

Sl no	Description	No	L	B	D	Qty	Rate	Amount
Item No:1								
	Demolishing cement concrete manually/ by mechanical means including disposal of material to the appropriate disposal area as per direction of Engineer-in-charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix) Qty up to 125%							**Cum**
	Reserved qty vide 3rd and part bill E-MB p.No- is released					**30.00**		
	Qty above 125%					**30.00**	**900.00**	**27000.00**
Item No:04								
	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work In all kinds of soils Depth upto 1.5 m Qty up to 125%							**Cum**
	Qty Vide pre-Measurement page No (2)					223.60		
	Qty Vide pre-Measurement page No (11)					333.65		
	Total					557.25		

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Sl no	Description	No	L	B	D	Qty	Rate	Amount
	Qty Upto 125%					97.00	205.00	19885.00
	Qty above 125%					460.25	205.00	94351.25
Item No:5								
Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:4:8 (M5) Using 40 mm nominal size graded crushed coarse aggregates								Cum
	Qty Vide pre-Measurement page No (3)					37.27		
	Qty Vide pre-Measurement page No (16)					28.82		
	Total					66.08	6135.00	405416.14
Item No:6								
Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)								Cum
	Qty Vide pre-Measurement page No (6)					165.37		
	Qty Vide pre-Measurement page No (18)					128.62		
	Total					293.99	6206.32	1824597.31
Item No:8								
Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates								Cum
	Qty Vide pre-Measurement page No (15)					87.53		
	Total					87.53	6782.98	593681.31
Item No:9								
Providing and laying heavy duty cobble stones 65mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications								

AARTN ASSOCIATES BANGALORE DATE No.

Contractor

Assistant Engineer
Project Division Yelahanka
16/3/2023

Assistant Executive Engineer
Project Division Yelahanka
16/3/23

Assistant Executive Engineer
Project Division
Yelahanka Zone

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Sl no	Description	No	L	B			D	Qty	Rate	Amount
	Isro layout North to south	1	20.60	2.00	+	2.00		41.20		
				2.00						
	Gate portion	1	5.00	3.10	+	5.20		20.75		
				2.00						
	Gate	1	5.00	5.20	+	3.00		20.50		
				2.00						
		1	28.00	2.00	+	2.00		56.00		
				2.00						
	East to west	1	30.00	2.00	+	2.00		60.00		
				2.00						
		1	3.00	2.00	+	2.00		6.00		
				2.00						
	Gate	1	3.00	1.60	+	1.50		4.65		
				2.00						
		1	30.00	2.00	+	2.00		60.00		
				2.00						
		1	30.00	2.00	+	2.10		61.50		
				2.00						
		1	15.30	2.10	+	2.10		32.13		
				2.00						
	Opposite gate	1	9.30	3.30	+	3.30		30.69		
				2.00						
Total								393.42		
Qty Upto 125%								393.42	1243.59	489255.07
Item No:11										
Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates										Cum
Qty Vide pre-Measurement page No 7								14.71		
Qty Vide pre-Measurement page No 19								14.85		
Total								29.56		
Qty above 125%								29.56	7132.47	210821.66

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Project Division Yelahanka

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Sl no	Description	No	L	B	D	Qty	Rate	Amount
Item No:13								
Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete								
	Isro Layout Pathway	2	20.60			41.20		
	North to south	2	5.00			10.00		
	Gate portion	2	5.00			10.00		
	Gate	2	28.00			56.00		
		2	30.00			60.00		
		2	3.00			6.00		
		2	3.00			6.00		
		2	30.00			60.00		
		2	30.00			60.00		
		2	30.00			60.00		
		2	30.00			60.00		
		2	15.30			30.60		
Total length in mtrs						**399.80**		
Total kerbs in Nos						**889.00**		
Total						**889.00**	**580.54**	**516098.64**
Item No:14								
Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces								
	Isro Layout Pathway	2	20.60		0.3	12.36		
		2	5.00		0.3	3.00		
		2	5.00		0.3	3.00		
		2	28.00		0.3	16.80		

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Sl no	Description	No	L	B	D	Qty	Rate	Amount
		2	30.00		0.3	18.00		
		2	3.00		0.3	1.80		
		2	3.00		0.3	1.80		
		2	30.00		0.3	18.00		
		2	30.00		0.3	18.00		
		2	30.00		0.3	18.00		
		2	15.30		0.3	9.18		
	Total					119.94	97.08	11643.78
Item No:15								
Fabricating, providing and erecting in position of MS. Hot dip galvanized Sq. Hallow Poles of 132*132 Heavy gauge of length 3000mm with MS. Hot dip galvanized grill work as per approved design and drawing of chief architect. Using 12*75mm galvanized flat for alround frame and 20mm*20mm galvanized-forged design with square for vertical at 150mm C/C as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flat, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading with cost and conveyance of all materials, labour, machinery and incidental charges for the successful complete of the work as per the direction Engineer-in-charge of the work.								
	ISRO Layout							
	South side	1	7.10		1.82	12.92		
	East side	1	30.00		1.82	54.60		
		1	12.40		1.82	22.57		
		1	15.00		1.82	27.30		
	North side	1	20.00		1.82	36.40		
		1	30.00		1.82	54.60		
		1	9.70		1.82	17.65		
		1	1.40		1.82	2.55		
	East side	1	22.00		1.82	40.04		268.63

CRPC Kaumudhy 16/3/23

Asst. Executive Engineer
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Assistant Engineer
Project Division Yelahanka
16/8/2023

Assistant Executive Engineer
Project Division Yelahanka

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2568.63

Sl no	Description	No	L	B	D	Qty	Rate	Amount
	North side	1	16.00		1.82	29.12		
	West side	1	30.00		1.82	54.60		
		1	30.00		1.82	54.60		
		1	5.35		1.82	9.74		
		1	19.00		1.82	34.58		
		1	11.00		1.82	20.02		
		1	18.90		1.82	34.40		
	Puttenahalli lake bus depo to Anathapura gate	1	30.00		1.82	54.60		
		1	30.00		1.82	54.60		
		1	12.65		1.82	23.02		
		1	30.00		1.82	54.60		
		1	20.00		1.82	36.40		
		1	30.00		1.82	54.60		
		1	30.00		1.82	54.60		
		1	30.00		1.82	54.60		
		1	0.80		1.82	1.46		
	Sai baba (Cauvery) Park north side	1	3.65		1.86	6.79		
		1	9.60		1.86	17.86		
						0.00		
		1	12.70		1.86	23.62		
		1	12.63		1.86	23.49		
		1	3.25		1.86	6.05		
		1	3.00		1.86	5.58		
		1	11.00		1.86	20.46		
		1	12.50		1.86	23.25		
		1	19.10		1.86	35.53		
	East side	1	22.40		1.86	41.66		
		1	13.10		1.86	24.37		

Asst. Executive Engineer
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Yelahanka Zone
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BBMP, Bangalore -92

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Assistant Engineer
Project Division Yelahanka

16/3/2023

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Sl no	Description	No	L	B			D	Qty	Rate	Amount
		1	13.20				1.86	24.55		
	South side	1	12.80				1.86	23.81		
		1	9.10				1.86	16.93		
		1	6.10				1.86	11.35		
		1	10.21				1.86	18.99		
		1	8.40				1.86	15.62		
		1	6.42				1.86	11.94		
		1	16.15				1.86	30.04		
		1	16.20				1.86	30.13		
		1	13.20				1.86	24.55		
Total in Sqm								1330.73		
Qty upto 125%								1330.73	16265.75	21645271.52
Item No:16										
Fabricating, providing and erecting in position Hot dip galvanised Gate. Using 72*72*4.8mm Sq. GI Pipe frame with top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile,20mm hot dip galvanised sq.rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged omamental design in between sq.rods and heads at top,middle and bottom. Intermediate supports of 75*12mm and 50*6mm arch bent to hot .dip galvanised flats.the work is inclusive of throughing GI.flat GI sq.rods,placing,welding all the joints including grinding,finishing metal patty,painting wo coats enamel painting.The rate is									
	Vishveshwaraiah park Gate	1	4.14				2.94	12.17		
		1	2.59				3.18	8.24		
		1	2.31				2.70	6.24		
		1	2.03				2.83	5.74		
	Sai baba (Cauvery) Park	1	3.65				3.09	11.28		
		1	3.05				2.29	6.98		
		1	2.22				2.76	6.13		

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Assistant Engineer
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16/3/2023

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Sl no	Description	No	L	B	D	Qty	Rate	Amount
	Isro Layout Park	1	5.00		2.05	10.25		
		1	1.50		2.45	3.68		
	Total in Sqm					70.70		
	Qty upto 125%					70.70	22218.70	1570970.93
Item No:17								
Providing, laying & fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification.								
	For Gajebo							
	Vishveshwaraiah park	1*3.14*(7.40*7.40)/4				42.99		
	Sai baba (Cauvery) Park	1*3.14*(7.20*7.20)/4				40.69		
	Vishveshwaraiah park Benches	7	2.40	2.00 + 2.00		33.60		
				2.00				
	Total in Sqm					117.28	1303.78	152909.14
Item No:18								
Providing & fixing on roof pressed clay tile (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete.								
	For Gajebo							
	Vishveshwaraiah park	1*3.14*(7.65*7.65)/4				45.94		
	Sai baba (Cauvery) Park	1*3.14*(7.5*7.5)/4				44.16		
	Total in Sqm					90.10	299.01	26939.40
Item No:19								
Executive Bench- Made out of Sadarahalli grey granite stone with hand supports with 3 line finishing with arch/plain design with 100mm slabs. Height 90x Length 1500 width 45 cms (1.50 * 0.45 * 0.90m) (Including lead and lift charges) (Inclusive of all taxes) As per the direction of Engineer Incharge								
	Benches							

Asst. Executive Engineer Project Division Yelahanka Zone BBMP, Bangalore - 92

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Sl no	Description	No	L	B	D	Qty	Rate	Amount
	Vishveshwaraiah park Benches	7	C&PC Kaundy 16/3			7.00		
				Total in Sqm		7.00	18940.31	132582.16
Item No:20								
Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading,grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour,rolling,water,all materials,usage& all other appurtenaces required to complete the work. Qty up to 125%								
				Qty Vide pre-Measurement page No 12		98.36		
				Qty Upto 125%		4.98	460.16	2291.59
				Qty above 125%		93.38	460.16	42967.37
Item No:EI-04								
Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification (V-II, P.No-190, I No-21.10 of PWD SR 2021-22)								
				Qty Vide pre-Measurement page No 19		293.29		
				Qty Vide pre-Measurement page No 20		230.15		
				Total in Sqm		523.44	272.48	142627.61
Item No:EI-05								
Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.								158796.00
				Qty Vide pre-Measurement page No 13		59.01	2691.01	158804.57
					Total			28067419 / 28068114.43
	Add GST 18% for item Nos from 1 to 17 & 19 20 to 103 and Item No EI-04 & EI-05							5052260.60
					Total			33120375.03

28065295.00
5022487.00
33087782.00

28067419.00
5023409.00
33090828.00

3,30,87,700

PMC

Assistant Engineer 16/3/2023
Project Division Yelahanka

Contractor

16/3/23
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